

Amendments to the Drawings

Replacement Sheets for Figures 13, 15, and 16 are included. These Replacement Sheets replace the original sheets with Figures 13, 15, and 16.

Remarks

Claims 1-92 were pending in the present application before entrance of the present Amendment. Claims 20-27 have been rejected, and claims 1-19 and 28-92 are withdrawn from consideration at this time.

No claims have been amended by the present Amendment. New claims 93-96 have been added. Support for claims 93-96 can be found on page 86, lines 3-25, where the cloning of Ror1 and Ror2 is described. Flag-tagged Ror1 and Ror2 polypeptides are described on page 75, line 24, through page 76, line 33, and are diagramed in Figure 5A. Applicant submits that no new matter has been added to the application by these amendments. Claims 1-19 and 28-92 have been canceled.

Applicant respectfully requests reexamination and reconsideration of the case based on the amended claims. Each of the rejections levied in the Office Action is addressed individually below.

I. Drawings. The Examiner has objected to Figures 13, 15, and 16 under 37 C.F.R. § 1.83(a) for failing to show details as described in the specification. In particular, the Examiner states that Figures 13, 15, and 16 are not legible. Included with this response are Replacement Sheets for Figures 13, 15, and 16 that are more legible. Applicant respectfully submits that the Replacements Sheets render moot the present objection.

II. Specification. The Examiner has objected to the abstract of the disclosure because it includes statements that are not related to the content of the invention. The abstract has been amended to remove these statements. Applicant requests that the objection be withdrawn.

III. Rejection under 35 U.S.C. § 102. Claims 20 and 23 stand rejected by the Examiner under 35 U.S.C. § 102(b) as being anticipated by Clary (WO 98/45708, published October 15, 1998). The Examiner maintains that Clary “teaches a method of identifying one or more compounds that modulate the function of a receptor protein tyrosine kinase (RPTK) in a cell, including orphan RPTKs such as Ror2” Applicant disagrees. Furthermore, Applicant

submits that Clary does not teach that the identified agent is a “bone-related agent” as claimed in the present application. Therefore, since Clary does not teach this aspect of the claimed invention, Clary cannot anticipate the claimed invention.

Although Clary in general describes a method of identifying modulators of RPTK activity in a cell, it does not specifically call out Ror family members. Ror1 and Ror2 are merely included in a laundry list of tyrosine kinases in Clary. The disclosure of Clary is particularly interested in only one tyrosine kinase, that is, C-RET. Clary states that modulators of C-RET may be useful in the treatment of neurodegenerative disorders. Clary does not provide any specifics regarding the identification of modulators of Ror1 or Ror2. Applicant, therefore, respectfully submits that the generic disclosure of Clary does not anticipate a method of identifying modulators of Ror activity.

In addition, the present application claims a method of identifying agents that modulate Ror activity as a way of identifying bone-related agents. The term “bone-related agents” is defined in the specification on page 49, lines 9-13. A “bone-related agent” is an agent that influences bone formation or bone resorption. Such agents may induce anabolic or catabolic effects, may inhibit bone resorption and result in increased bone mineral density, may increase bone formation, or may maintain the balance between bone formation and bone resorption. Clary does not teach or suggest any such connection between Ror family members and bone metabolism. Therefore, Clary cannot anticipate the claimed invention because it does not teach or suggest each limitation of the claims. *Minn. Mining & Mfg. Co. v. Johnson & Johnson Orthopaedics, Inc.*, 976 F.2d 1559, 1565, 24 USPQ2d 1321, 1326 (Fed.Cir. 1992).

Applicant requests that the rejection under § 102 be removed.

III. Rejection under 35 U.S.C. § 103. Claims 25 and 27 stand rejected under 35 U.S.C. § 103 as being unpatentable over Clary (WO 98/45708) in view of Oishi *et al.* (*Genes to Cells*, 4:41-56, 1999). Examiner states that Clary does not teach that Ror2 has autophosphorylation activity as recited in claims 25 and 27. The examiner cites Oishi *et al.* for the teaching that Ror1 and Ror2 exhibit autophosphorylation activity. Although this may be true, neither reference teaches the connection between Ror and bone metabolism as recited in claim 20 based on the

phrase “wherein detection of a decrease or increase in Ror activity is indicative of an agent being a bone-related agent.” Therefore, the two references even in combination cannot render obvious the claimed invention because neither reference teaches that modulators of Ror are bone-related agents. Applicant, therefore, requests that the rejection be removed.

In view of the forgoing remarks, Applicant respectfully submits that the present case is now in condition for allowance. A Notice to that effect is requested.

Please charge any fees that may be required for the processing of this Response, or credit any overpayments, to our Deposit Account Number 03-1721.

Respectfully submitted,

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